

CLAIMS

1. An improved method for cancer therapy, comprising:
administering the combination of a cytokine-expressing cellular vaccine and at
5 least one additional cancer therapeutic agent selected from the group consisting of an
anti-CTLA4 antibody, an anti-4-1BB antibody, interferon-alpha, docetaxel, paclitaxel, a
COX-2 inhibitor, an anti- CD40 antibody or CD40 ligand, an anti-OX40 antibody or OX-
40 ligand and a heat shock protein (HSP), to a subject with cancer, wherein
administration of the combination to the subject results in enhanced therapeutic
10 efficacy relative to administration of the cytokine-expressing cellular vaccine or the
at least one additional cancer therapeutic agent alone.
2. The method of claim 1, wherein the cytokine-expressing cellular vaccine
expresses GM-CSF.
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3. The method of claim 2, wherein the cells of said cytokine-expressing cellular
vaccine are autologous to the subject.
4. The method of claim 2, wherein the cells of said cytokine-expressing cellular
20 vaccine are allogeneic to the subject.
5. The method of claim 2, wherein the cells of said cytokine-expressing cellular
vaccine cells are bystander cells.
- 25 6. The method of claim 2, wherein the cells of the cytokine-expressing cellular
vaccine are rendered proliferation-incompetent by irradiation.
7. The method of claim 2, wherein the mammal is a human.
- 30 8. The method of claim 2, wherein the cancer is a prostate cancer.

9. The method of claim 2, wherein the cancer is a non-small cell lung carcinoma.

10. The method of claim 4, wherein the allogeneic cells are a tumor cell line
5 selected from the group consisting of a prostate tumor line, a non-small cell lung carcinoma line and a pancreatic cancer line.

11. The method of claim 2, wherein said at least one additional cancer therapeutic agent includes an anti-CTLA4 antibody.

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12. The method of claim 2, wherein said at least one additional cancer therapeutic includes an anti-4-1BB antibody.

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13. The method of claim 2, wherein said at least one additional cancer therapeutic agent includes interferon-alpha.

14. The method of claim 2, wherein said at least one additional cancer therapeutic agent includes docetaxel or paclitaxel.

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15. The method of claim 14, wherein said at least one additional cancer therapeutic agent includes docetaxel.

16. The method of claim 2, wherein said at least one additional cancer therapeutic agent includes a COX-2 inhibitor.

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17. The method of claim 16, wherein said COX-2 inhibitor is Celecoxib.

18. The method of claim 2, wherein said at least one additional cancer therapeutic agent includes an anti-CD40 antibody or CD40 ligand.

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19. The method of claim 2, wherein said at least one additional cancer therapeutic agent is expressed by a cell and the cell is an autologous, allogeneic or a bystander cell.

20. The method of claim 19, wherein the autologous, allogeneic or a bystander cell
5 is rendered proliferation-incompetent by irradiation.

21. The method of claim 20, wherein the autologous, allogeneic or a bystander cell expresses interferon-alpha.

10 22. The method of claim 20, wherein the autologous, allogeneic or a bystander cell expresses CD40 ligand.

23. The method of claim 2, wherein said cytokine-expressing cellular vaccine is administered subcutaneously.

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24. The method of claim 2, wherein said cytokine-expressing cellular vaccine is administered intratumorally.

25. The method of claim 16, wherein said COX-2 inhibitor is administered before
20 the GM-CSF-expressing cellular vaccine.

26. The method of claim 18, wherein said anti-CD40 antibody is administered after
the GM-CSF-expressing cellular vaccine.

25 27. The method of claim 18, wherein said CD40 ligand is administered after the
GM-CSF-expressing cellular vaccine.

28. An improved composition for cancer therapy, comprising:

a GM-CSF expressing cellular vaccine and at least one additional cancer
30 therapeutic agent selected from the group consisting of an anti-CTLA4 antibody, an

anti-4-1BB antibody, interferon-alpha, docetaxel, Celecoxib, an anti- CD40 antibody and CD40 ligand for administration to a subject with cancer, wherein administration of the combination results in enhanced therapeutic efficacy relative to administration of the GM-CSF expressing cellular vaccine or the at least one additional cancer therapeutic agent alone.

5 29. The composition of claim 28, wherein the cells of said cytokine-expressing cellular vaccine are autologous to the subject.

10 30. The composition of claim 28, wherein the cells of said cytokine-expressing cellular vaccine are allogeneic to the subject.

31. The composition of claim 28, wherein the cells of said cytokine-expressing cellular vaccine cells are bystander cells.

15 32. The composition of claim 28, wherein the cells of said cytokine-expressing cellular vaccine are rendered proliferation-incompetent by irradiation.

20 33. The composition of claim 30, wherein said allogeneic cells are a tumor cell line selected from the group consisting of a prostate tumor line, a non-small cell lung carcinoma line and a pancreatic cancer line.

34. The composition of claim 28, wherein said at least one additional cancer therapeutic agent is an anti-CTLA4 antibody.

25 35. The composition of claim 28, wherein said at least one additional cancer therapeutic is an anti-4-1BB antibody.

36. The composition of claim 28, wherein said at least one additional cancer 30 therapeutic agent is interferon-alpha.

37. The composition of claim 28, wherein said at least one additional cancer therapeutic agent is docetaxel.

5 38. The composition of claim 28, wherein said at least one additional cancer therapeutic agent is Celecoxib.

39. The composition of claim 28, wherein said at least one additional cancer therapeutic agent is an anti-CD40 antibody or CD40 ligand.

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40. The composition of claim 28, wherein said at least one additional cancer therapeutic agent is expressed by a cell and the cell is autologous, allogeneic or a bystander cell.

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41. The composition of claim 40, wherein the autologous, allogeneic or bystander cell is rendered proliferation-incompetent by irradiation.

42. The composition of claim 41, wherein the autologous, allogeneic or a bystander cell expresses interferon-alpha.

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43. The composition of claim 41, wherein the he autologous, allogeneic or a bystander cell expresses CD40 ligand.

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